first magnet plate and the second magnet plate, and the second piston vibrates along the axis.

8. The transducer assembly of claim **7** wherein the first voice coil and the second voice coil are arranged around side by side protrusions formed along an end of the first support plate.

9. The transducer assembly of claim **7** wherein the first piston and the second piston are both coupled to the first support plate and the third support plate.

10. A transducer assembly comprising:

a magnet motor assembly comprising a first magnet plate, a second magnet plate, a center plate positioned along inward facing surfaces of the first magnet plate and the second magnet plate, and a pair of outer plates positioned along outward facing surfaces of the first magnet plate and the second magnet plate to form a plurality of channels along ends of the center plate that extend beyond the first and second magnet plates; and

a coil positioned around at least one of the ends of the center plate and within at least one of the plurality of channels.

11. The transducer assembly of claim **10** wherein the coil is one of a first pair of coils and the assembly further comprises a second pair of coils, the first pair of coils are positioned along a first axis and the second pair of coils are positioned along a second axis perpendicular to the first axis.

12. The transducer assembly of claim **10** wherein the coil is a shaker coil, and the shaker coil is operable to move the magnet motor assembly in at least two different directions.

13. The transducer assembly of claim **12** wherein the shaker coil is fixed to a device to be actuated and the magnet motor assembly is mounted to a compliant base.

14. The transducer assembly of claim **10** wherein the coil is a first voice coil, and the transducer assembly further comprises a second voice coil, a first diaphragm coupled to the first voice coil and a second diaphragm coupled to the second voice coil.

15. The transducer assembly of claim **14** wherein the first voice coil and the second voice coil are operable to vibrate in directions parallel to at least two different axes.

16. The transducer assembly of claim **14** wherein the magnet motor assembly comprises an open center.

17. The transducer assembly of claim **16** wherein at least one of the first voice coil and the first diaphragm or the second voice coil and the second diaphragm are positioned within the open center and the first diaphragm.

18. The transducer assembly of claim **14** wherein an extension member extends from opposing surfaces of the center plate and through a center opening in the first magnet plate, the second magnet plate and the pair of outer plates.

19. The transducer assembly of claim **18** wherein at least one of the plurality of channels is formed between at least one end of the extension member and at least one of the pair of outer plates, and wherein the at least one of the plurality of channels receives a third voice coil arranged along a third axis different than at least two axes along which the first and second voice coils are arranged.

20. The transducer assembly of claim **19** wherein a third diaphragm is coupled to the third voice coil and is operable to vibrate in a direction parallel to the third axis.

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